



DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket Number USCG-2022-0995]

RIN 1625-AA00

Safety Zones in Reentry Sites; Panama City, Pensacola, and Tallahassee, Florida

AGENCY: Coast Guard, DHS.

ACTION: Notice of proposed rulemaking.

SUMMARY: This proposed rule would implement a special activities provision of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021. The Coast Guard is proposing to establish three temporary safety zones for the safe splashdown and recovery of reentry vehicles launched by Space Exploration Technologies Corporation (SpaceX) in support of National Aeronautics and Space Administration (NASA) missions. The proposed temporary safety zones are located within the Coast Guard District Eight area of responsibility (AOR) offshore of Panama City, Pensacola, and Tallahassee, Florida. These proposed temporary safety zones are also located specifically within the Coast Guard Sector Mobile AOR. This proposed rule would prohibit U.S.-flagged vessels from entering any of the temporary safety zones unless authorized by the Commanding Officer of Coast Guard Sector Mobile or a designated representative. Foreign-flagged vessels would be encouraged to remain outside the safety zones. This action is necessary to protect vessels and waterway users from the potential hazards created by reentry vehicle splashdowns and recovery operations in the U.S. Exclusive Economic Zone (EEZ). It is also necessary to provide for the safe recovery of reentry vehicles, and any personnel involved in reentry services,

after the splashdown. We invite your comments on this proposed rulemaking.

DATES: Comments and related material must be received by the Coast Guard on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments identified by docket number USCG-2022-0995 using the Federal Decision Making Portal at <https://www.regulations.gov>. See the “Public Participation and Request for Comments” portion of the **SUPPLEMENTARY INFORMATION** section for further instructions on submitting comments.

FOR FURTHER INFORMATION CONTACT: If you have questions about this proposed rulemaking, call or email Lieutenant Andrew Anderson Sector Mobile Waterways Division (dpw), U.S. Coast Guard; telephone: 251-441-5940, e-mail Andrew.S.Anderson@uscg.mil.

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

AOR	Area of Responsibility
BNM	Broadcast Notice to Mariners
CFR	Code of Federal Regulations
DHS	Department of Homeland Security
EEZ	Exclusive Economic Zone
FAA	Federal Aviation Administration
FL	Florida
FR	<i>Federal Register</i>
MSIB	Marine Safety Information Bulletin
NASA	National Aeronautics and Space Administration
NM	Nautical Mile
NOE	Notice of Enforcement
NPRM	Notice of Proposed Rulemaking
§	Section
SpaceX	Space Exploration Technologies Corporation
U.S.	United States
U.S.C.	United States Code

II. Background, Purpose, and Legal Basis

On January 1, 2021, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Pub. L. 116-283) (Authorization Act) was

enacted. Section 8343 (134 Stat. 4710) calls for the Coast Guard to conduct a two-year pilot program to establish and implement a process to establish safety zones to address special activities in the U.S. Exclusive Economic Zone (EEZ).¹ These special activities include space activities² carried out by United States (U.S.) citizens. Terms used to describe space activities, including *launch*, *reentry site*, and *reentry vehicle*, are defined in 51 U.S.C. 50902, and in this document.

The Coast Guard has long monitored space activities impacting the maritime domain and taken actions to ensure the safety of vessels and the public as needed during space launch³ operations. In conducting this activity, the Coast Guard engages with other government agencies, including the Federal Aviation Administration (FAA) and National Aeronautics and Space Administration (NASA), and private space operators, including Space Exploration Technologies Corporation (SpaceX). This engagement is necessary to ensure statutory and regulatory obligations are met to ensure the safety of launch operations and waterway users.

During this engagement, the Coast Guard was informed of space reentry vehicles and recovery operations in the U.S. EEZ. Section 50902 of 51 U.S.C. defines "reentry vehicle" as a vehicle designed to return from Earth orbit or outer space to Earth, or a reusable launch vehicle designed to return from Earth orbit or outer space to Earth, substantially intact. SpaceX, a U.S. company, has identified three reentry sites⁴ within the U.S. EEZ of the Coast Guard District Eight area of responsibility (AOR) expected to be used for the splashdown⁵ and recovery of reentry vehicles. All of these sites are located in the Gulf of Mexico off the coast of Florida (FL).

¹ The Coast Guard defines the U.S. *exclusive economic zone* in 33 CFR 2.30(a). *Territorial sea* is defined in 33 CFR 2.22.

² *Space Activities* means space activities, including launch and reentry, as such terms are defined in section 50902 of Title 51, United States Code, carried out by United States citizens.

³ The term *launch* is defined in 51 U.S.C. 50902.

⁴ *Reentry site* means the location on Earth to which a reentry vehicle is intended to return (as defined in a license the FAA Administrator issues or transfers under this chapter).

⁵ *Splashdown* refers to the landing of a reentry vehicle into a body of water.

On May 4, 2022, we published a temporary final rule in the **Federal Register** (87 FR 26273) for two anticipated reentry vehicle recovery missions within the Coast Guard District Eight AOR offshore of Panama City, Pensacola, and Tallahassee, FL from April 17, 2022 through May 15, 2022. Based on the date the Coast Guard was informed of the reentry, and the immediate need to establish the safety zone, the Coast Guard did not have sufficient time to publish a notice of proposed rulemaking (NPRM) for that rule. The Coast Guard additionally published recovery mission temporary final rules for the periods from August 22, 2022 through September 30, 2022 (87 FR 51253) and October 12, 2022 through November 10, 2022 (87 FR 61508).

The purpose of this rulemaking is to ensure the protection of vessels and waterway users in the U.S. EEZ from the potential hazards created by reentry vehicle splashdowns and recovery operations, and the safe recovery of reentry vehicles and personnel involved in reentry services.⁶ The Coast Guard is proposing this rulemaking under authority of section 8343 of the Authorization Act.

III. Discussion of Proposed Rule

The Coast Guard is proposing to establish three temporary safety zones in the U.S. EEZ for the safe reentry vehicle splashdown and recovery of reentry vehicles launched by SpaceX in support of NASA missions through the remainder of the pilot period, which ends on February 4, 2024.

The proposed temporary safety zones are located within the Coast Guard District Eight AOR offshore of Panama City, Pensacola, and Tallahassee, FL in the Gulf of Mexico. The proposed rule would prohibit U.S.-flagged vessels from entering any of the safety zones unless authorized by the Commanding Officer of Coast Guard Sector Mobile or a designated representative. Because the safety zones are within the U.S. EEZ, only

⁶ *Reentry Services* means (1) activities involved in the preparation of a reentry vehicle and payload, crew (including crew training), government astronaut, or space flight participant, if any, for reentry; and (2) the conduct of a reentry.

U.S.-flagged vessels would be subject to enforcement. However, all foreign-flagged vessels would be encouraged to remain outside the safety zones.

The three proposed temporary safety zones are located off the coast of FL in the Gulf of Mexico in the following areas: (1) Approximately 30 NM southwest from Pensacola; (2) 26 NM southwest from Panama City; and 40 NM south of Tallahassee. All three safety zones have an approximate area of 100 square miles and are in the shape of a square.

The coordinates for the safety zones are based on the furthest north, east, south, and west points of the reentry vehicles splashdown and are determined from data and modeling by SpaceX and NASA. The coordinates take into account the trajectories of the reentry vehicles coming out of orbit, the potential risk to the public, and the proximity to medical facilities that meet NASA requirements. The specific coordinates for the three temporary safety zones are presented in the regulatory text at the end of this document.

To the extent feasible, the Sector Commander or a designated representative would inform the public of the activation of the three temporary safety zones by Notice of Enforcement (NOE) published in the **Federal Register** at least two days before the reentry vehicle splashdown. The NOE would identify the approximate date(s) during which a reentry vehicle splashdown and recovery operations would occur.

To the extent possible, twenty-four hours before a reentry vehicle splashdown and recovery operations, the Sector Commander or designated representative would inform the public that only one of the three safety zones would remain activated (subject to enforcement) until announced by Broadcast Notice to Mariners (BNM) on VHF-FM channel 16, and/or Marine Safety Information Bulletin (MSIB) (as appropriate) that the safety zone is no longer subject to enforcement. The specific temporary safety zone to be enforced would be based on varying mission and environmental factors, including atmospheric conditions, sea state, weather, and orbital calculations.

The MSIB would include the geographic coordinates of the activated safety zone, a map identifying the location of the activated safety zone, and information related to potential hazards associated with a reentry vehicle splashdown and recovery operations associated with space activities, including marine environmental and public health hazards, such the release of hydrazine and other potential oil or hazardous substances.

When the safety zone is activated, the Sector Commander or a designated representative would be able to restrict U.S.-flagged vessel movement including but not limited to transiting, anchoring, or mooring within the safety zone to protect vessels from hazards associated with space activities. The activated safety zone would ensure the protection of vessels and waterway users from the potential hazards created by reentry vehicle splashdowns and recovery operations. This includes protection during the recovery of a reentry vehicle, and the protection of personnel involved in reentry services and space support vessels.⁷

After a reentry vehicle splashdown, the Sector Commander or a designated representative would grant general permission to come no closer than 3 NM within the activated safety zone from any reentry vehicle or space support vessel engaged in the recovery operations. The recovery operations are expected to last approximately one hour. That should allow for sufficient time to let any potential toxic materials clear the reentry vehicle, recovery of the reentry vehicle by the space support vessel, and address any potential medical evacuations for any personnel involved in reentry services that were onboard the reentry vehicle.

Once a reentry vehicle and any personnel involved in reentry services are removed from the water and secured onboard a space support vessel, the Sector Commander or designated representative would issue a BNM on VHF-FM channel 16

⁷ *Space Support Vessel* means any vessel engaged in the support of space activities. These vessels are typically approximately 170 feet in length, have a forward wheelhouse, and are equipped with a helicopter pad and lifting crane.

announcing the activated safety zone is no longer subject to enforcement. A photograph of a reentry vehicle and space support vessel expected to use the reentry sites are available in the docket.

IV. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and Executive orders related to rulemaking. Below we summarize our analyses based on a number of these statutes and Executive orders, and we discuss First Amendment rights of protestors.

A. Regulatory Planning and Review

Executive Orders 12866 and 13563 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits. This NPRM has not been designated a “significant regulatory action,” under Executive Order 12866. Accordingly, the NPRM has not been reviewed by the Office of Management and Budget (OMB).

This regulatory action determination is based on the size, location, duration, and scope of the temporary safety zones. The temporary safety zones are limited in size and location to only those areas where reentry vehicles splashdown and recovery operations occur. The safety zones are limited in scope, as vessel traffic would be able to safely transit around the activated safety zone which will only impact a small part of the U.S. EEZ within the Gulf of Mexico. The proposed rule involves the establishment of three temporary safety zones which would be activated two days before a reentry vehicle splashdown and recovery operations. Twenty-four hours before a reentry vehicle splashdown, one of the three temporary safety zones would remain active. After a reentry vehicle splashdown, general permission would be granted to come no closer than 3 NM within the activated safety zone. There is a danger associated with fumes from the reentry

vehicle after it has splashed down. Once a reentry vehicle and any personnel involved in reentry services are removed from the water and secured onboard a space support vessel, the activated safety zone would no longer be subject to enforcement. The activated safety zone would ensure the protection of vessels and waterway users from the potential hazards created by a reentry vehicle splashdown and recovery operations and the recovery of a reentry vehicle, personnel involved in reentry services, and space support vessel.

B. Impact on Small Entities

The Regulatory Flexibility Act of 1980, 5 U.S.C. 601–612, as amended, requires Federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. The Coast Guard certifies under 5 U.S.C. 605(b) that this proposed rule would not have a significant economic impact on a substantial number of small entities.

The safety zones are only expected to last a few hours from reentry vehicle splashdown to recovery. Vessels will be able to transit around the activated safety zone location during these recoveries. We do not anticipate any significant economic impact resulting from activation of the safety zones.

If you think that your business, organization, or governmental jurisdiction qualifies as a small entity, and that this proposed rule would have a significant economic impact on it, please submit a comment (see **ADDRESSES**) explaining why you think it qualifies and how and to what degree this rule would economically affect it.

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Public Law 104-121), we want to assist small entities in understanding this proposed rule. If the proposed rule would affect your small business, organization, or

governmental jurisdiction and you have questions concerning its provisions or options for compliance, please call or email the person listed in the **FOR FURTHER INFORMATION CONTACT** section. The Coast Guard will not retaliate against small entities that question or complain about this proposed rule or any policy or action of the Coast Guard.

C. Collection of Information

This proposed rule would not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

D. Federalism and Indian Tribal Governments

A rule has implications for federalism under Executive Order 13132 (Federalism), if it has a substantial direct effect on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this proposed rule under that Order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

Also, this proposed rule does not have tribal implications under Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments) because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. If you believe this proposed rule has implications for federalism or Indian tribes, please call or email the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

E. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local,

or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Though this proposed rule would not result in such an expenditure, we do discuss the potential effects of this proposed rule elsewhere in this preamble.

F. Environment

We have analyzed this proposed rule under Department of Homeland Security Directive 023-01, Rev. 1, associated implementing instructions, and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have made a preliminary determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This proposed rule involves the establishment of three temporary safety zones which would be activated two days before a reentry vehicle splashdown and recovery operations. Twenty-four hours before a reentry vehicle splashdown, one of the three temporary safety zones would remain active. After a reentry vehicle splashdown, general permission would be granted to come no closer than 3 NM within the activated safety zone. Once a reentry vehicle and any personnel involved in reentry services are removed from the water and secured onboard a space support vessel, the activated safety zone would no longer be subject to enforcement. Normally such actions are categorically excluded from further review under paragraph L60(a) of Appendix A, Table 1 of DHS Instruction Manual 023–01–001–01, Rev. 1. A preliminary Record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the **ADDRESSES** section of this preamble. We seek any comments or information that may lead to the discovery of a significant environmental impact from this proposed rule.

G. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to call or email the person listed in the **FOR FURTHER INFORMATION CONTACT** section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places, or vessels.

V. Public Participation and Request for Comments

We view public participation as essential to effective rulemaking, and will consider all comments and material received during the comment period. Your comment can help shape the outcome of this rulemaking. If you submit a comment, please include the docket number for this rulemaking, indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation.

Submitting comments. We encourage you to submit comments through the Federal Decision Making Portal at <https://www.regulations.gov>. To do so, go to <https://www.regulations.gov>, type USCG-2022-0995 in the search box and click "Search." Next, look for this document in the **Search Results** column, and click on it. Then click on the **Comment** option. If you cannot submit your material by using <https://www.regulations.gov>, call or email the person in the **FOR FURTHER INFORMATION CONTACT** section of this proposed rule for alternate instructions.

Viewing material in docket. To view documents mentioned in this proposed rule as being available in the docket, find the docket as described in the previous paragraph, and then select "Supporting & Related Material" in the Document Type column. Public comments will also be placed in our online docket and can be viewed by following instructions on the <https://www.regulations.gov> Frequently Asked Questions webpage. We review all comments received, but we will only post comments that address the topic of the proposed rule. We may choose not to post off-topic, inappropriate, or duplicate comments that we receive.

Personal information. We accept anonymous comments. Comments we post to <https://www.regulations.gov> will include any personal information you have provided. For more about privacy and submissions to the docket in response to this document, see DHS's eRulemaking System of Records notice (85 FR 14226, March 11, 2020).

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard is proposing to amend 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

1. The authority citation for part 165 is revised to read as follows:

Authority: 46 U.S.C. 70034, 70051, 70124; section 8343 of Pub. L. No. 116-283, 134 Stat. 3388, 4710; 33 CFR 1.05-1, 6.04-1, 6.04-6, and 160.5; Department of Homeland Security Delegation No. 00170.1, Revision No. 01.3.

2. Add § 165.T08-0995 to read as follows:

§ 165.T08-0995 Safety Zones in Reentry Sites; Panama City, Pensacola, and Tallahassee, Florida.

(a) **Location.** The coordinates used in this paragraph are based on the World Geodetic System (WGS) 1984. The following areas are safety zones:

(1) **Panama City Site.** All waters from surface to bottom encompassed within a line connecting the following points: Point 1, thence to Point 2, thence to Point 3, thence to Point 4, and then back to Point 1.

Point 1	29°47'46" N	086°16'44" W
Point 2	29°47'46" N	086°05'20" W

Point 3	29°37'48" N	086°16'44" W
Point 4	29°37'48" N	086°05'20" W

(2) ***Pensacola.*** All waters from surface to bottom encompassed within a line connecting the following points: Point 1, thence to Point 2, thence to Point 3, thence to Point 4, and then back to Point 1.

Point 1	29°53'02" N	087°35'46" W
Point 2	29°53'02" N	087°24'14" W
Point 3	29°42'58" N	087°35'46" W
Point 4	29°42'58" N	087°24'14" W

(3) ***Tallahassee Site.*** All waters from surface to bottom encompassed within a line connecting the following points: Point 1, thence to Point 2, thence to Point 3, thence to Point 4, and then back to Point 1.

Point 1	29°21'47" N	084°17'46" W
Point 2	29°21'47" N	084°06'18" W
Point 3	29°11'46" N	084°17'46" W
Point 4	29°11'46" N	084°06'18" W

(b) **Definitions.** As used in this section --

Designated representative means a Coast Guard Patrol Commander, including a Coast Guard coxswain, petty officer, or other officer operating a Coast Guard vessel; Coast Guard Representatives in the Merrill Operations Center; and other officers designated by the Sector Commander of Coast Guard Sector Mobile.

Sector Commander means Commander of Coast Guard Sector Mobile.

Reentry Services means (1) activities involved in the preparation of a reentry vehicle and payload, crew (including crew training), government astronaut, or space flight participant, if any, for reentry; and (2) the conduct of a reentry.

Reentry vehicle means a vehicle designed to return from Earth orbit or outer space to Earth, or a reusable launch vehicle designed to return from Earth orbit or outer space to Earth, substantially intact.

Space Support Vessel means any vessel engaged in the support of space activities. These vessels are typically approximately 170 feet in length, have a forward wheelhouse, and are equipped with a helicopter pad and lifting crane.

Splashdown means the landing of a reentry vehicle into a body of water.

(c) **Regulations.** (1) Because the safety zones described in paragraph (a) of this section are within the U. S. Exclusive Economic Zone, only U.S.-flagged vessels are subject to enforcement. All foreign-flagged vessels are encouraged to remain outside the safety zones.

(2) In accordance with the general regulations in 33 CFR part 165, subpart C, no U.S.-flagged vessel may enter the safety zones described in paragraph (a) of this section unless authorized by the Sector Commander or a designated representative, except as provided in paragraph (d)(3).

(d) **Notification of Enforcement.** (1) To the extent feasible, the Sector

Commander or a designated representative will inform the public of the activation of the three safety zones described in paragraph (a) of this section by Notice of Enforcement published in the **Federal Register** at least two days before the splashdown.

(2) To the extent possible, twenty-four hours before a reentry vehicle splashdown, the Sector Commander or designated representative will inform the public that only one of the three safety zones described in paragraph (a) will remain activated until announced by Broadcast Notice to Mariners on VHF-FM channel 16, and/or Marine Safety Information Bulletin (as appropriate) that the safety zone is no longer subject to enforcement.

(3) After a reentry vehicle splashdown, the Sector Commander or a designated representative will grant general permission to come no closer than 3 nautical miles of any reentry vehicle or space support vessel engaged in the recovery operations, within the activated safety zone described in paragraph (a) of this section.

(4) Once a reentry vehicle, and any personnel involved in reentry service, are removed from the water and secured onboard a space support vessel, the Sector Commander or designated representative will issue a Broadcast Notice to Mariners on VHF-FM channel 16 announcing the activated safety zone is no longer subject to enforcement.

(e) *Effective period.* This section is effective from [EFFECTIVE DATE OF FINAL RULE] through February 4, 2024.

Dated: January 5, 2023.

Ulysses S. Mullins,
Captain, Commander, Coast Guard Sector Mobile,
Captain of the Port Mobile.